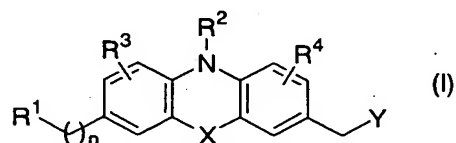
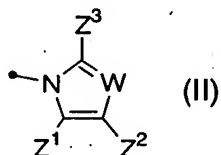


# Abstract

The present invention provides an agent for prevention and/or treatment of itching comprising a substance capable of suppressing the function involved in signal transduction of GPR4 as an active ingredient. It also provides a nitrogen-containing tricyclic compound represented by the formula (I) or a quaternary ammonium salt thereof, or a pharmaceutically acceptable salt thereof;



[wherein R<sup>1</sup> represents substituted or unsubstituted lower alkyl, etc.; R<sup>2</sup> represents hydrogen, substituted or unsubstituted lower alkyl, etc.; R<sup>3</sup> and R<sup>4</sup> are the same or different and each represents hydrogen, lower alkyl, etc.; n represents 0 or 1; X represents -(CH<sub>2</sub>)<sub>2</sub>-, etc.; and Y represents the formula (II);



(wherein W represents CH or a nitrogen atom; Z<sup>1</sup> and Z<sup>2</sup> are the same or different and each represents hydrogen, substituted or unsubstituted lower alkyl, etc.; and Z<sup>3</sup> represents hydrogen, substituted or unsubstituted lower alkyl, etc.)]